



STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
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January 14, 2004

TO: Washington State Board of Health

FROM: Carl Osaki, WSBOH Member

RE: **PUBLIC HEARING FOR PROPOSED CHANGES TO CHAPTERS 246-290 WAC:
GROUP A PUBLIC WATER SYSTEMS – ARSENIC STANDARDS AND LONG TERM
1 ENHANCED SURFACE WATER TREATMENT RULE**

Summary

The Environmental Protection Agency (EPA) lowered the federal standards for arsenic in drinking water from 50 parts per billion (ppb) to 10 ppb for community water systems and non-transient, non-community water systems serving more than 25 people (Group A public water systems), effective February 2002. EPA set a January 2006 compliance date for this rule in an effort to balance public health protection with compliance costs. Lowering the federal arsenic standard comes after years of debate over what is considered an acceptable level of arsenic in drinking water. (Please see <http://www.epa.gov/OGWDW/arsenic.html>.)

EPA did not apply the 10 ppb to transient non-community water systems, which currently have a Washington state arsenic maximum contamination level (MCL) of 50 ppb. Adoption of the draft rule proposed today would eliminate the 50 ppb arsenic MCL for transient non-community water systems.

The draft rule incorporates another federal regulation, the Long Term 1 Enhanced Surface Water Treatment Rule, which strengthens protection from microbial pathogens, specifically the protozoan *Cryptosporidium*. Group A systems with surface water sources such as streams, lakes, and reservoirs would be required to remove 99% of *Cryptosporidia* through enhanced filtration, and monitor disinfection byproducts. (Please see EPA fact sheet for more information, at http://www.epa.gov/OGWDW/mdbp/lt1eswtr_fact.html.)

Unless the Board adopts standards at least as stringent as the federal drinking water standards, EPA could replace DOH as the agency in charge of enforcing and implementing Group A drinking water standards in Washington. (Please see Safe Drinking Water Act summary for more information, at <http://www.epa.gov/OGWDW/sdwa/understand.pdf>.)

As of January 5, 2004, the Department of Health and the Board have not received formal public comment in response to the CR-102 with proposed changes to chapter 246-290 WAC. However, DOH staff has received public comment during workshops. Today, Rich Hoey, DOH Office of Drinking Water Acting Director, will present background information on the rule revision, including public input received throughout the process.

Recommended Board Motion

The Board adopts the revised chapter 246-290 WAC as published in WSR 03-24-106.

Background

The State Board of Health (SBOH) has statutory authority under RCW 43.20.050 to adopt rules to protect public water supplies. Chapter 246-290 WAC defines basic regulatory requirements to protect the health of consumers using Group A public drinking water supplies, which generally serve 15 or more connections or 25 or more people. Local boards of health may adopt rules that are more stringent than SBOH rules for Group A systems (WAC 246-290-030).

There are three types of Group A public water systems: community, non-transient non-community, and transient non-community.

- 1) **Community** water systems regularly serve at least 25 year-round (i.e., more than 180 days per year) residents. Examples might include a municipality, subdivision, mobile home park, apartment complex, college with dormitories, nursing home, or prison.
- 2) **Non-transient non-community (NTNC)** water systems make service available to 25 or more of the same nonresidential people for 180 or more days in a calendar year. Examples might include a school, day care center, or a business, factory, motel, or restaurant with 25 or more employees on-site.
- 3) **Transient non-community (TNC)** water systems generally serve the same people for less than 180 days within a calendar year. Examples might include a restaurant, tavern, motel, campground, park, an RV park, vacation cottages, highway rest area, fairground, concert facility, special event facility, or church.

The federal government lowered its standard for arsenic in drinking water from 50 ppb to 10 ppb for community water systems and non-transient non-community water systems serving more than 25 people (Group A systems). The new standard has an effective date of February 22, 2002, and a compliance date of January 23, 2006, to balance public health protection with compliance costs. EPA estimates that the average annual costs for community water systems that exceed the 10 ppb and are required to treat their water range from approximately \$6,400 to more than \$1,300,000 for the largest systems. The average annual cost per household is estimated to range from \$.86 for households on the larger systems to \$327 for households on 25-person systems.

EPA did not apply the 10 ppb standard to transient non-community water systems, which currently have a Washington state arsenic maximum contamination level (MCL) of 50 ppb. Adoption of the draft rule proposed today would eliminate the 50 ppb arsenic MCL for transient non-community water systems. The Department of Health (DOH) recommends this standard be eliminated to avoid having dual arsenic standards, and because of the limited chronic health impact—maximum contamination levels are based on studies linking long-term arsenic exposure with negative health effects and assume a lifetime of consuming water of that quality. Operators of transient non-community water systems would still be required to monitor arsenic levels at the time the water system is created, and DOH would take action if acute health risks from arsenic were identified in transient non-community water systems.

Studies have linked long-term exposure to arsenic in drinking water to cancer of the skin, bladder, lungs, kidney, nasal passages, liver, and prostate. Non-cancer effects of ingesting arsenic include cardiovascular, pulmonary, immunological, neurological, and endocrine (e.g., diabetes) effects.

Lowering the maximum contaminant level for arsenic in drinking water presented public health and political challenges at the federal level. The new federal standard comes after years of debate over what is considered an acceptable level of arsenic in drinking water. EPA received comments from more than 1,100 stakeholders.

Discussions of arsenic standards for drinking water should occur as part of addressing overall arsenic exposure. Arsenic exposure from soil, smelter and mining releases, treated lumber used for playground equipment and decks has been a focus of public health agencies and the news media.